

(i) a "Preliminary Amendment and Request Pursuant to 37 C.F.R. § 1.607 for Declaration of Interference with Issued U.S. Patent No. 5,974,299" on February 15, 2000 ("February 15, 2000 Request"); and

(ii) a "Supplemental Preliminary Amendment and Request Pursuant to 37 C.F.R. § 1.607 for Declaration of Interference with Issued U.S. Patent No. 5,974,299" on June 20, 2000. ("June 20, 2000 Supplemental Request.")

Thus, the applicants request that an interference be declared involving the subject application, the Massetti patent, and the '758 application, as summarized in Section II below.

Note that the February 15, 2000 Request expressly referred to the '758 application, indicating that "the applicants believe that there may be interfering subject matter contained in the Massetti CIP application" (February 15, 2000 Request at 35), and the applicants submitted a copy of the '758 application with a supplemental information disclosure statement filed on February 7, 2001. (The applicants did not have a copy of the '758 application at the time the February 15, 2000 Request was filed, and later obtained a copy that was published with a corresponding EPO application.)

#### **I. Preliminary Remarks**

Claims 1-158 are pending in the application. By this amendment, claims 1-69 and 78-158 are being canceled, for reasons unrelated to patentability, to expedite prosecution of the remaining claims. Accordingly, claims 70-77 are at issue, of which claims 70, 72, 74, 76, and 77 are independent. Claims 71, 73, and 75 are substantially identical to claims 1, 17, and 18, respectively, of the Massetti patent.

The Massetti patent has 20 claims, of which claims 1, 17, and 18 are independent claims.

The '758 application as filed has 20 claims, of which claims 1, 16, and 17 are independent claims.

## **II. Summary of Requests for Interference**

The applicants respectfully request that an interference be declared as follows:

An interference is proposed involving the following 2 parties:

Senior Party: LU, et al. Appl. No. 09/076,517 Filed May 12, 1998

Proposed Priority benefit: None

The claims of LU, et al. which correspond to this count are Claims 70-77.

Patentable pending claims of LU, et al. are Claims 70-77.

Unpatentable pending claims of LU, et al. None.

The claims of LU, et al. NOT corresponding to this count are None.

Junior Party: Massetti.

1. Appl. No. 09/289,758 Filed April 12, 1999

Proposed Priority benefit: U.S. Application No. 09/085,501, filed May 27,

1998, now U.S. Patent No. 5,974,299, issued October 26, 1999 (listed below).

The claims of the Massetti application which correspond to this count are

Claims 1-20 (all claims).

Pending claims of the Massetti application are Claims 1-20.

Unpatentable pending claims of the Massetti application are Unknown.

The claims of the Massetti application NOT corresponding to this count are

Unknown.

2. Appl. No. 09/085,501, filed May 27, 1998, now U.S. Patent No. 5,974,299,

Issued October 26, 1999

Proposed Priority benefit: None.

The claims of the Massetti patent which correspond to this count are Claims

1-20 (all claims).

Patented claims of the Massetti patent are Claims 1-20.

The claims of the Massetti patent NOT corresponding to this count are None.

**III. Suggestion of a Proposed Count and Identification of Claims that Correspond to the Proposed Count Pursuant to 37 C.F.R. § 1.604(a)(1)**

**A. Suggestion of Proposed Count**

Applicants propose Count A as set forth in attached Appendix A. (Count A was previously proposed in the February 15, 2000 Request, at pages 20-23 and Appendix A.) Proposed Count A is a phantom count, as it is broader in scope than all claims believed to correspond to Count A. Count A encompasses the subject matter of independent claims 70, 72, 74, and 76 of the subject application. Specifically, the first alternative statement of proposed Count A is identical to claim 76; the second alternative statement of proposed Count A incorporates the subject matter of claim 70 and claim 72; and the third alternative statement of Count A is identical to claim 74. Use of a single count with three alternatives is appropriate because the three alternatives recite a single patentable invention. Claims 70 and 72 have identical limitations. The sole difference between these two claims is that the preamble of

claim 70 recites “[a]n audience rating system for digital television and radio,” whereas the preamble of claim 72 recites “[a] system for recording reception of pay programs on digital television and radio.” Claim 74 claims an apparatus corresponding to the method of claim 70. Specifically, claim 74 contains the identical limitations as claim 70, along with the phrase “means for” inserted at the beginning of each limitation.

Claim 76 is based on claim 70, and, as explained in detail below, these claims recite a single patentable invention. A comparison between claim 76 and claim 70 is set forth in the table below:

CLAIM 70	CLAIM 76
An audience rating system for digital television and radio, comprising the steps of:	An audience measurement method for digital programming, comprising the steps of:
extracting at least one identification code for at least one digital stream of a first channel, from a control stream of a multiplexed digital transmission, when reception of the first channel by a receiver begins;	extracting at least one identification code from at least one digital multiplexed stream of a first program when reception of the first program by a receiver begins;
recording at least one identification code extracted and thus time reception of the first channel begins;	recording the at least one identification code and the time that reception of the first program begins;
extracting at least one identification code for at least one digital stream of any subsequent channel, from the control stream of the multiplexed digital transmission, when reception of the subsequent channel by the receiver begins; and	extracting at least one identification code from at least one digital multiplexed stream of any subsequent program when reception of the subsequent program by the receiver begins; and
recording at least one identification code extracted and the time reception of the subsequent channel begins.	recording the at least one identification code and the time that reception of the subsequent program begins.

As shown in the table above, claim 76 differs from claim 70 in the following manner: (1) the preamble of claim 76 recites “[a]n audience measurement method for digital programming,” whereas claim 70 recites “[a]n audience rating system for digital television and radio”; (2) claim 76 substitutes “program” for the term “channel” in claim 70; (3) claim 76 substitutes “from at least one digital multiplexed stream” for the phrases “for at least one digital stream of a first channel, from a control stream of a multiplexed digital transmission” and “for at least one digital stream of any subsequent channel, from the control stream of the multiplexed digital transmission” in claim 70; and (4) claim 76 does not include the term “extracted” in the final limitation of the claim.

Claim 77, which, as noted in Section III(B) below, corresponds substantially to proposed count A, is based on claims 70 and 76, and a side-by-side comparison between claim 77 and claim 76 is set forth in the table below:

CLAIM 76	CLAIM 77
An audience measurement method for digital programming, comprising the steps of:	A method of determining audience ratings in connection with digital programming comprising the following steps:
extracting at least one identification code from at least one digital multiplexed stream of a first program when reception of the first program by a receiver begins;	a) reading a first identification datum from a multiplexed digital stream corresponding to a first program tuned by a digital program tuner;
recording the at least one identification code and the time that reception of the first program begins;	b) time stamping the first identification datum;
extracting at least one identification code from at least one digital multiplexed stream of any subsequent program when reception of the subsequent program by the receiver begins; and	c) subsequently reading a second identification datum from a multiplexed digital stream corresponding to a second program tuned by the digital program tuner; and,
recording the at least one identification code and the time that reception of the subsequent program begins.	d) time stamping the second identification datum.

As shown in the table above, claim 77 differs from claim 76 in the following manner: (1) the preamble of claim 77 recites “[a] method of determining audience ratings in connection with digital programming,” whereas the preamble of claim 76 recites “[a]n audience measurement method for digital programming”; (2) claim 77 substitutes the term “identification datum” for the term “identification code” in claim 76; (3) claim 77 uses the term “time stamping” to refer to “recording” an identification datum and recording “the time” that reception begins, as recited in claim 76; and (4) claim 77 substitutes the term “reading” for the term “extracting” in claim 76.

Claims 76 and 77 are identical in scope as claim 70, but differ from claim 70 (which is based on Massetti claim 1) in that claims 76 and 77 use terminology that is more consistent with the terminology used in the Lu et al. specification, which the applicants believe is consistent with the terminology generally used by those of ordinary skill in the art. Moreover, the preambles of claims 76 and 77 clearly indicate that each of these claims recites a “method.”

**B. Identification of Claims of the Subject Application That Correspond to Proposed Count A**

Claims of the subject application that correspond to proposed Count A were previously identified in the February 15, 2000 Request, at page 24. Application claims 70, 72, 74, and 76 correspond exactly to proposed Count A. More particularly, application claim 76 corresponds exactly to the first alternative statement of proposed Count A, application claims 70 and 72 correspond exactly to the second alternative statement of proposed Count A and application claim 74 corresponds exactly to the third alternative statement of proposed Count A.

Application claims 71, 73, 75, and 77 correspond substantially to proposed Count A. Application claims 71, 73, and 75 are substantially identical to Massetti claims 1, 17, and 18, respectively. Accordingly, application claims 71 and 73 differ from claims 70 and 72, respectively, (and from the second alternative statement of Count A) in that claims 71 and 73 also include the limitation “recording the time that reception by the receiver is ended.” Application claim 75 differs from claim 74 (and from the third alternative statement of Count A) in that claim 75 also includes the limitation “means for recording the time that reception by the receiver is ended.” As

explained in detail in Section III(A) above, claim 77 is identical in scope as claim 70 (second alternative statement of Count A) and claim 76 (first alternative statement of Count A), but uses some terminology different from that used in those claims.

**IV. Identification of Interfering Application and Claims of the Application that Correspond to Proposed Count A Pursuant to 37 C.F.R. § 1.604(a)(2)**

**A. Identification of Interfering Application**

As noted above, the applicants request declaration of an interference with U.S. application Serial No. 09/289,758 (the “‘758 application”), which was filed on April 12, 1999, as a continuation-in-part of application Serial No. 09/085,501, filed on May 27, 1998, which issued as Massetti, U.S. Patent No. 5,974,299, on October 26, 1999.

**B. Identification of Claims of the ‘758 Application That Correspond to Proposed Count A**

The ‘758 application as filed contains 20 claims, of which claims 1, 16, and 17 are independent claims. As explained below, each claim determined to be patentable should be designated as corresponding to proposed Count A.

**1. Claims 1, 6, 10-13, and 16-19**

Claims 1, 6, 10, 11, 12, 13, 16, 17, 18, and 19 of the ‘758 application are substantially identical to claims 1, 2, 8, 9, 10, 11, 17, 18, 19, and 20, respectively, of the issued Massetti patent. Accordingly, these claims are unpatentable in the ‘758 application for double-patenting under 35 U.S.C. § 101. However, in the event that the examiner determines that any of these claims is patentable, each claim should be designated as corresponding to proposed Count A, for the reasons indicated with respect to the corresponding claim of the Massetti patent in the February 15, 2000



Request and June 20, 2000 Supplemental Request.

**2. Claims 2-5, 7, and 9**

Claims 2-5, 7, and 9 of the '758 application, which depend directly or indirectly from claim 1, should be designated as corresponding to proposed Count A because they are not novel or unobvious in view of claim 1. Specifically, the table below provides examples of prior-art disclosures of the limitations of claims 2-5, 7, and 9 of the '758 application. (The table also indicates similar claims of the Massetti patent.) Accordingly, the references listed in the table below support the conclusion that the claims 2-5, 7, and 9 recite the same patentable invention as recited by claim 1. *See* 37 C.F.R. § 1.602(n) (stating that invention "A" is the same patentable invention as invention "B" if, assuming invention "B" is prior art with respect to invention "A," invention "A" is the same as or obvious in view of invention "B"). Consequently, claims 2-5, 7, and 9 should also be designated as corresponding to proposed Count A.

'758 Application Claim Nos.	Massetti Patent Claim Nos.	Claim Limitation	Reference
7	3, 11, 20	a plurality of multiplexed transmissions can be received at different frequencies	(inherent in Massetti independent claims)

'758 Application Claim Nos.	Massetti Patent Claim Nos.	Claim Limitation	Reference
7	3, 11, 20	when the receiver is turned on, the meter records a first frequency received, and the time reception of the first frequency begins, and when the frequency received is changed, the meter records any subsequent frequency received, and the time reception of the subsequent frequency begins	The meter 158 shown in Figs. 5 and 6 of the Lu '934 patent notes the channel (i.e., frequency) and time each time the channel (i.e., frequency) changes. Therefore, this patent discloses a meter which, when the receiver is turned on, records a first received frequency and the time that reception of the first frequency begins and which, when the received frequency is changed, records any subsequent received frequency and the time that reception of the subsequent frequency begins.
2	4, 12	the multiplexed digital transmission is transmitted by electromagnetic radiation	It is well known that multiplexed digital transmissions to television and radio receivers are effected by electromagnetic radiation.
3	5, 13	the multiplexed digital transmission is transmitted by electricity	It is well known that multiplexed digital transmissions to television and radio receivers are effected by electricity.

'758 Application Claim Nos.	Massetti Patent Claim Nos.	Claim Limitation	Reference
4	6, 14	data recorded by the meter are stored in a memory unit of the meter	As shown in Figs. 3, 5, and 6 of the Lu '934 patent, the data recorded by the meter 158 is stored in a memory unit 164.
5	7, 15	data recorded by the meter are transmitted to a computer	See, for example, Lu '934 at Figs. 3, 5, and 6 and column 12, lines 62-64.
9	10	the control stream is accessed by the meter through an access control card connector	(obvious to use any known connector)

Each of claims 2-5, 7, and 9 is obvious over claim 1 and the prior art, as shown by the table above.

Lu et al., U.S. Patent No. 5,594,934, discloses a tunable receiver monitoring system 10 having a real time correlation meter 12-1 (*see* Figs. 1, 3), which is used to identify a program being received by a tunable receiver (such as a television or radio receiver). The monitoring system 10 includes a reference side processing system 38, which captures elementary snippets or samples of each broadcast channel to be monitored. The snippets are transmitted to a correlation meter 12-1. The correlation meter 12-1 includes a digital signal processor 104 (Fig. 3), which compares samples of the output of the monitored receiver (e.g, television set) to the reference elementary samples transmitted by the reference side 38, until a match is obtained, after which the date, time, and channel being received are recorded (*see* Fig. 5).

McKenna, U.S. Patent No. 4,816,904, Fig. 1, discloses a television and market research data collection system in which a signal from a cable television system is separately received by a television (through a cable converter 19) and a meter.

Claim 1 of the '758 application recites a system for rating audiences for digital television and radio, which is the identical use as the Lu '934 and McKenna '904 systems, except that the system of claim 1 is designed for digital broadcasting rather than for analogue broadcasting. Because the systems disclosed in Lu '934 and McKenna '904 were well known at the time the '758 application was filed, and because they fall within the same technical field as claim 1 (both references are classified in the same class and subclass as the Massetti patent, and Lu '934 is of record in the Massetti patent), combining the disclosures of Lu '934 and McKenna '904 with claim 1 would be obvious to a person of ordinary skill in the art.

The limitation that a plurality of multiplexed transmissions can be received at different frequencies ('758 application claim 7) is inherent in the '758 application claim 1, which recites first and second channels being received in a multiplexed digital transmission. The limitation that a meter records first and subsequent frequencies received, and the time reception of each begins (claim 7) is disclosed, for example, in Lu '934 at Fig. 5, block 162 ("store date, time, and channel"). Indeed, any meter must operate in this fashion. Claim 7 recites the same patentable invention as claim 1 because, if claim 1 and the Lu '934 patent are combined as discussed above, the combination would include the limitations of claim 7 as shown by the table above.

The limitations that a multiplexed digital transmission is transmitted by electromagnetic radiation ('758 application claim 2) and by electricity ('758 application claim 3) are well known as noted in the table above. Accordingly, claims 2 and 3 recite the same patentable invention as claim 1.

The limitation that data recorded by the meter are stored in a memory unit of the meter ('758 application claim 4) is disclosed, for example, in Lu '934 at Figs. 3, 5, and 6. Claim 4 recites the same patentable invention as claim 1 because, if claim 1 and the Lu '934 patent are combined as discussed above, the combination would include the limitations of claim 4 as shown by the table above.

The limitation that data recorded by the meter are transmitted to a computer ('758 application claim 5) is disclosed, for example, in Lu '934 at Figs. 3, 5, and 6 and column 12, lines 62-64. Claim 5 recites the same patentable invention as claim 1 because, if claim 1 and the Lu '934 patent are combined as discussed above, the combination would include the limitations of claim 5 as shown by the table above.

The limitation that the control stream is accessed by the meter through an access control card ('758 application claim 9) is obvious over claim 1 because, as noted above, using a connector is obvious, and therefore use of any known connector, such as an access control card connector, is also obvious.

### **3. Claims 8, 14, 15, and 20**

Claims 8, 14, 15, and 20 of the '758 application should be designated as corresponding to proposed Count A because each of these claims is not novel or unobvious in view of one or more claims that should be designated to correspond to the count. Specifically, claim 8, which depends from claim 7, is obvious over claim 7; claim 14, which depends from claim 13, is obvious over claim 13; claim 15, which

depends from claim 14, is obvious over claim 14; and claim 20, which depends from claim 17, is obvious over claim 17. The table below provides examples of prior-art disclosures of the additional limitations of claims 8, 14, 15, and 20 of the '758 application. Accordingly, the references listed in the table below support the conclusion that claims 8, 14, 15, and 20 recite the same patentable invention as the claims from which they depend. *See* 37 C.F.R. § 1.602(n) (stating that invention "A" is the same patentable invention as invention "B" if, assuming invention "B" is prior art with respect to invention "A," invention "A" is the same as or obvious in view of invention "B"). Consequently, claims 8, 14, 15, and 20 should also be designated as corresponding to proposed Count A.

'758 Application Claim No.	Claim Limitation	Reference
8, 14	the receiver has a first tuner and the meter has a second tuner which is automatically tuned to the first frequency received when reception begins, and to any subsequent frequency when the frequency received is changed	Welsh et al., U.S. Patent No. 4,955,070 discloses an electronic meter 10 having a second tuner 16 (the first tuner is in a metered receiver, not shown). The tuner 16 is automatically tuned to the first frequency received when reception begins, and to any subsequent frequency when the frequency received is changed.
15	the first tuner and second tuner are both integrated receivers and decoders and the second tuner has a conditional access module for specific broadcaster	<i>See, e.g.</i> , Crosby et al., U.S. Patent No. 5,933,192; Bestler et al., U.S. Patent No. 5,590,202.

'758 Application Claim No.	Claim Limitation	Reference
20	when the receiver is turned on, and when the channel that the receiver is tuned to is changed, an elementary stream is extracted from the multiplexed digital transmission, the elementary stream is passed to a meter, the meter extracts at least one identification code from the elementary stream, and the meter records the identification code along with the time.	The Lu '934 patent discloses that a reference processing system 38 transmits a multiplexed transmission. A receiver 16/106/108/110/104 (Figure 6) extracts an elementary stream from the multiplexed stream and supplies the elementary stream to a meter 158. The meter 158 extracts an identification code (i.e., a channel code) from the elementary stream. <i>See also</i> Massetti patent claims 8, 16.
20	when reception by the receiver is ended, the meter records the time	'758 application claim 17 (last limitation) <i>See also</i> Massetti patent claims 2, 8, 19.

Each of claims 8, 14, 15, and 20 is obvious over claims corresponding to Count A and the prior art, as shown by the table above.

Welsh et al., U.S. Patent No. 4,955,070 discloses an apparatus and method for automatically monitoring audiences for radio and television broadcasts. Combining the disclosure of Welsh et al. with claims of the '758 application would be obvious to a person of ordinary skill in the art because the disclosure of Welsh et al. was well known at the time the '758 application was filed, and Welsh et al. falls within the same technical field as the '758 application (Welsh is classified in the same class and subclass as the Massetti patent).

The limitation that the receiver has a first tuner and the meter has a second tuner which is automatically tuned to the first frequency received when reception begins, and to any subsequent frequency when the frequency received is changed (claims 8 and 14), is disclosed in Welsh et al. Welsh et al. discloses an electronic meter 10 having a second tuner 16. (The first tuner, not shown, is in a metered receiver which provides an output that is monitored by a microphone 14 and tuner 16.) The tuner 16 is automatically tuned to the first frequency received when reception begins, and to any subsequent frequency when the frequency received is changed. *See* Welsh et al. Fig. 1 and col. 11, line 67 to col. 12, line 12. Accordingly, claims 8 and 14 are obvious over claims 7 and 13, respectively.

The limitation that the first tuner and second tuner are both integrated receivers and decoders (claim 15) is well known in the art for a tuner used to receive a digital signal. *See, e.g.*, Crosby et al., U.S. Patent No. 5,933,192, "Multi-Channel Digital Video Transmission Receiver with Improved Channel-Changing Response," Abstract (stating that digital video receiver contains tuning unit and decoder unit). Use of a tuner having a conditional access module, such as to de-crypt (unscramble) a signal, is also well known in the art, particularly in the cable and satellite television arts. Such a conditional access module is used whenever cable or satellite television broadcast signals have to be unscrambled, such as when those signals are broadcast in premium channels. *See, e.g.*, Bestler et al., U.S. Patent No. 5,590,202, "Countdown System for Conditional Access Module," which describes a digital conditional access module 20. (*See* Bestler et al., col. 2, line 65 to col. 3, line 5.) Accordingly, claim 15 is obvious over claim 14.



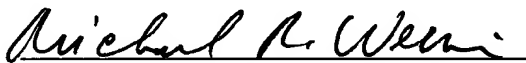
As for claim 20, the Lu '934 patent discloses that a reference processing system 38 transmits a multiplexed transmission (Fig. 1). A receiver 16/106/108/110/104 extracts an elementary stream from the multiplexed stream and supplies the elementary stream to a meter 158 (Fig. 6). The meter 158 extracts an identification code (i.e., a channel code) from the elementary stream. These functions occur when the receiver is turned on and when the channel that the receiver is tuned to is changed (although these functions can also occur when the channel that the receiver is tuned to is not changed). The limitation that, when reception by the receiver is ended, the meter records the time (claim 20) is disclosed in the '758 application, claim 17 (last limitation), as noted in the table above. Accordingly, claim 20 is obvious over claim 17.

### CONCLUSION

For the foregoing reasons, the applicants respectfully request declaration of an interference between the Lu et al. application and the '758 application.

Respectfully submitted,  
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